



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

#### [EPA-R01-OAR-2018-0771; FRL-9987-00-Region 1]

#### **Air Plan Approval; Massachusetts; Air Emissions Inventory, Emissions Statements, Source Registration, and Emergency Episode Planning Provisions**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve State Implementation Plan (SIP) revisions submitted by the Commonwealth of Massachusetts. The revisions establish a 2011 base year emissions inventory, an emissions statement certification, revisions to an existing stationary source registration program, and requirements to be undertaken during air pollution emergencies. This action is being taken under the Clean Air Act.

**DATES:** Written comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R01-OAR-2018-0771 at <https://www.regulations.gov>, or via email to [mcconnell.robert@epa.gov](mailto:mcconnell.robert@epa.gov). For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, the EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will

generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the “For Further Information Contact” section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>. Publicly available docket materials are available at <https://www.regulations.gov> or at the U.S. Environmental Protection Agency, EPA Region 1 Regional Office, Office of Ecosystem Protection, Air Quality Planning Unit, 5 Post Office Square – Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office’s official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding legal holidays.

**FOR FURTHER INFORMATION CONTACT:** Bob McConnell, Environmental Engineer, Air Quality Planning Unit, Air Programs Branch (Mail Code OEP05-02), U.S. Environmental Protection Agency, Region 1, 5 Post Office Square, Suite 100, Boston, Massachusetts, 02109-3912; (617) 918-1046; [mcconnell.robert@epa.gov](mailto:mcconnell.robert@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document whenever “we,” “us,” or “our” is used, we mean EPA. The term “the Commonwealth” refers to the State of Massachusetts.

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## **I. Background**

On March 12, 2008, the EPA revised both the primary and secondary NAAQS for ozone to a level of 0.075 parts per million (ppm) (annual fourth-highest daily maximum 8-hour average concentration, averaged over three years) to provide increased protection of public health and the environment (73 FR 16436, March 27, 2008). The 2008 ozone NAAQS retains the same general form and averaging time as the 0.08 ppm NAAQS set in 1997, but is set at a more protective level. Under the EPA's regulations at 40 CFR part 50, the 2008 8-hour ozone NAAQS is attained when the 3-year average of the annual fourth highest daily maximum 8-hour average ambient air quality ozone concentrations is less than or equal to 0.075 ppm. *See* 40 CFR 50.15.

Effective July 20, 2012, the EPA designated as nonattainment any area that was violating the 2008 8-hour ozone NAAQS based on the three most recent years (2008–2010) of air monitoring data (77 FR 30088, May 21, 2012). Within that rulemaking, Dukes County in Massachusetts was designated as a marginal ozone nonattainment area. Pursuant to section 182(a) of the Clean Air Act (CAA), marginal ozone nonattainment areas are required to submit a number of SIP revisions, including, pursuant to section 182(a)(1), an emissions inventory containing actual emission estimates from all sources, and, pursuant to section 182(a)(3)(B), an emissions statement program to collect actual emissions data from certain industrial sources within the state. Massachusetts accomplishes the latter by means of requirements within title 310 of the

Code of Massachusetts Regulations (CMR), specifically, within 310 CMR 7.12, Source Registration.

Each time EPA revises a NAAQS, states are required by section 110(a)(2) to submit a certification that their SIP contains the necessary requirements to carry out all the state's obligations under the CAA. These SIPs are referred to as infrastructure SIPs, and EPA conditionally approved several aspects of Massachusetts' infrastructure SIPs for the 1997 ozone, 2008 ozone, and 2010 SO<sub>2</sub> NAAQS. *See* 81 FR 93627 (December 21, 2016). On February 9, 2018, Massachusetts submitted 310 CMR 8.00, *The Prevention and/or Abatement of Air Pollution Episode and Air Pollution Incident Emergencies*, to satisfy one of the conditions within EPA's December 21, 2016, final rule.

## **II. Description and Evaluation of Commonwealth's Submittals**

### *A. Emissions statement certification*

EPA's implementation rule for the 2008 ozone NAAQS, herein referred to as the 2008 ozone rule, was published in the Federal Register on March 6, 2015. *See* 80 FR 12264. The 2008 ozone rule notes that many areas that were nonattainment for the 2008 ozone NAAQS had previously adopted an emissions statement reporting program due to being nonattainment for a prior ozone NAAQS. For these areas, the 2008 ozone rule indicates that the state should review its existing rule to see whether it still meets the requirements of section 182(a)(3)(B) of the CAA, and if the state determines that it does, the state may submit a SIP revision certification to that effect to meet this obligation for purposes of the 2008 ozone NAAQS.

On February 9, 2018, Massachusetts submitted an emissions statement certification as a SIP revision request. The submittal notes that Massachusetts had previously adopted an emissions statement program pursuant to obligations it had under the one-hour ozone standard, and that EPA approved that program into the Massachusetts SIP on March 24, 1996. *See* 61 FR 11556.

Massachusetts reviewed its current set of air pollution reporting requirements and confirmed that pursuant to its authority under 310 CMR 7.12, Source Registration, all stationary sources of volatile organic compounds (VOCs) and/or nitrogen oxides (NOx) that emit 25 tons or more per year of those pollutants are required to report their emissions to the Commonwealth, along with a certification as to the accuracy of the reported emissions. EPA has approved 310 CMR 7.12 into the Massachusetts SIP, most recently on April 24, 2014. *See* 79 FR 22774. Emissions from smaller stationary sources that emit less than 25 tons per year of VOC and/or NOx are inventoried as area sources within emissions inventories prepared by the Commonwealth, such as the 2011 emissions inventory that is described in section II.B of this proposal. Given the above, we propose to approve Massachusetts' emissions statement certification for purposes of the 2008 ozone NAAQS.

*B. 2011 base year emissions inventory*

CAA section 172(c)(3) requires that each SIP include a "comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in [the] area...." In requiring an accounting of actual emissions from all sources of the relevant pollutants in the area, this section provides for the "base year" inventory to include all emissions that contribute to the formation of a particular NAAQS pollutant. Additionally, for the 2008 ozone NAAQS, EPA's March 6, 2015, ozone rule recommended 2011 be used as the base year.

On February 9, 2018, the Commonwealth submitted to EPA an emissions inventory of ozone precursors for 2011 as a SIP revision request. The inventory was submitted to meet the CAA section 182(a)(3)(A) obligation to develop a base year inventory. Massachusetts conducted a public comment process on the inventory which concluded on February 2, 2018. The inventories include emission estimates in tons per summer day and represent emissions estimates from stationary and mobile source categories during a typical summer day when ozone formation is

highest. The ozone emissions inventory catalogs NO<sub>x</sub> and VOC emissions because these pollutants are precursors to ozone formation. The Commonwealth's 2011 emissions inventory contains emission estimates for each county in the Commonwealth.<sup>1</sup>

The Massachusetts 2011 emission inventory documents the procedures used to estimate emissions from individual stationary sources, referred to as point sources. The inventory describes how individual industrial sources with emissions as low as 1 ton per year submit, by means of the Massachusetts Department of Environmental Protection's (MA-DEP's) "eDEP" online application, information on fuel use, materials use, air pollution control equipment, and air emissions. The Commonwealth transmitted its 2011 point source air emissions data to EPA's National Emissions Inventory (NEI) database in accordance with the requirements found within 40 CFR part 51, subpart A.

Area source emission estimates are made for small, stationary sources of air pollution that do not emit much individually but do have significant emissions collectively. Examples include gasoline stations, automobile refinishing shops, and architectural and industrial maintenance coatings. The Commonwealth's area source emissions inventory identifies the source categories for which the Commonwealth relied upon EPA's estimates, provides information on any adjustments made to EPA estimates, and notes which categories' emission estimates were prepared by the Commonwealth. The inventory also explains how double counting was avoided between emissions from facilities inventoried as individual point sources and area source emission estimates.

Massachusetts relied upon emission estimates obtained from EPA's Motor Vehicle Emissions Simulator (MOVES) model to calculate emissions for on-road and most non-road mobile source sectors. The Commonwealth provided the model with local activity inputs

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<sup>1</sup> Although the Massachusetts 2011 emissions inventory contains emissions estimates for all counties in the Commonwealth, pursuant to Section 182(a)(3)(A), only an inventory for the Commonwealth's marginal nonattainment area, Dukes county, was required.

including vehicle miles traveled (VMT) provided by the Massachusetts Department of Transportation, and data on vehicle type from the Massachusetts Registry of Motor Vehicles. Massachusetts also provided inputs to the model for meteorological parameters and fuel characteristics.

We propose to find that the air emission estimates for these sources were adequately accounted for in the Commonwealth's 2011 emissions inventory. The methodology used to calculate emissions for each source category followed relevant EPA guidance, most notably the July 2017 guidance entitled "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards and Regional Haze Regulations." Additionally, the Commonwealth used appropriate, documented emission factors, or relied on emission estimates prepared for EPA's National Emissions Inventory. Furthermore, the inventory submittal is sufficiently documented as to the techniques used to prepare the emission estimates.

Table 1 shows the emissions by source category, in tons per summer day (tpsd), from the 2011 base year emission inventory for Dukes County.

*Table 1: Emissions Inventory Summary for Dukes County (tons/summer day)*

	<b>Dukes County</b>	
<b>Source</b>	VOC	NO <sub>x</sub>
<i>Point</i>	0.09	0.67
<i>Area</i>	1.20	0.06
<i>Nonroad</i>	4.01	6.47
<i>Onroad</i>	0.10	0.21
<i>Biogenic</i>	3.31	0.19
<i>Totals</i>	8.71	7.00

Additional details regarding the Massachusetts emissions inventory are included in the Commonwealth's 2011 Periodic Emissions Inventory document, which is available in the docket for this proposed rulemaking. The inventories are based on the most current and accurate

information available to the Commonwealth at the time the inventories were being developed. Additionally, the inventories comprehensively address all source categories in the Commonwealth's nonattainment area and were developed consistent with the relevant EPA inventory guidance. For these reasons, we are proposing to approve the 2011 base year emissions inventory for Dukes county into the Massachusetts SIP as meeting the requirements of CAA section 172(c)(3).

### *C. Stationary source registration requirements*

On May 10, 2018, Massachusetts submitted updates to 310 CMR 7.12, Source Registration, which provides the applicability levels and reporting requirements for industrial sources to use to report air emissions data to the Commonwealth. The revisions include an exemption for small combustion sources whose only emissions come from burning oil or gas, a revision to the annual reporting due date for some filers, and a lowered reporting threshold for lead.

The Commonwealth's previous reporting thresholds had been quite low, requiring approximately 2,300 individual facilities to report their air emissions to the Commonwealth, and was considerably lower than required by the federal reporting guidelines found within 40 CFR part 51, subpart A, Air Emissions Reporting Requirements. Subpart A essentially only requires sources considered major for Title V permitting purposes to report their emissions to the state. The Commonwealth's reporting requirements will continue to be more stringent than what is minimally required by 40 CFR part 51, subpart A, after accounting for the exemption. Additionally, emissions from the small, exempted sources will be covered within the area source portion of the emission inventories that the Commonwealth periodically prepares.

Subpart A's air emissions reporting requirements directs states to report their data to EPA by December 31 of the year following that in which the emissions occurred. To accomplish this,

states set reporting deadlines generally in the springtime for sources to report their emissions to the state. Massachusetts has moved up some of its reporting deadlines for sources reporting to the Commonwealth in order to provide the Commonwealth with more time to review the submitted information and prepare electronic files for submittal to EPA.

In February of 2015, EPA made a number of changes to the air emissions reporting requirements of 40 CFR part 51, subpart A, including a lowering of the threshold for sources emitting lead from 5 tons per year to 0.5 tons per year. The Commonwealth is, therefore, modifying its lead reporting threshold to match the new federal reporting threshold of 0.5 tons per year.

In addition to the above, Massachusetts made several other minor updates and clarifications to 310 CMR 7.12. These changes, as well as additional details regarding the changes described above, are available within the Commonwealth's SIP submittal which is available in the docket for this action. We are proposing approval of these revisions for the reasons stated above.

#### *D. Emergency episode planning provisions*

On February 9, 2018, Massachusetts submitted 310 CMR 8.00, *The Prevention and/or Abatement of Air Pollution Episode and Air Pollution Incident Emergencies*, to EPA as a SIP revision request. The Commonwealth submitted this regulation in response to EPA's December 21, 2016, final rule, which conditionally approved one aspect of the Commonwealth's Infrastructure SIP submissions for CAA section 110(a)(2)(G) for the 1997 ozone, 2008 ozone, and 2010 SO<sub>2</sub> NAAQS. *See* 81 FR 93629. Specifically, EPA conditionally approved the submissions for the contingency plan requirements of section 110(a)(2)(G). Additional details regarding EPA's rationale for requiring that the Commonwealth revise its SIP to address this issue are explained within our July 20, 2016, Notice of Proposed Rulemaking. *See* 81 FR 47133.

We propose that 310 CMR 8.00 satisfies the contingency plan requirements of CAA section 110(a)(2)(G) and implementing regulations at 40 CFR part 51, subpart H. More specifically, 310 CMR 8.00 is modeled on EPA's example regulations for emergency contingency plans at 40 CFR part 51, appendix L, and specifies episode criteria and control actions for air pollution alerts, warnings, and emergencies to prevent ambient pollution concentrations from reaching significant harm levels, thereby satisfying 40 CFR 51.151 and 51.152(a)(1) and (3). *See* 310 CMR 8.03 and 8.07. Section 8.03 also specifically provides for acquisition of forecasts of atmospheric stagnation conditions from the National Weather Service (NWS), thereby satisfying 40 CFR 51.152(b)(1). *See* 310 CMR 8.03(1)(a). Moreover, the Commonwealth, as a matter of practice, posts on the internet daily forecasted ozone and fine particle levels through the EPA AirNow and EPA EnviroFlash systems. Information regarding these two systems is available on EPA's website at <https://www.airnow.gov>. Notices are sent out to EnviroFlash participants when levels are forecast to exceed the current 8-hour ozone and fine particle standards. In addition, when levels are expected to exceed these standards in Massachusetts, the media are alerted via a press release, and the NWS is alerted to issue an Air Quality Advisory through the normal NWS weather alert system. *See also* 310 CMR 8.05(4). These actions are similar to the notification and communication requirements of 40 CFR 51.152(a)(2), (b)(1), and (b)(3). Finally, Massachusetts' emergency contingency plan satisfies 40 CFR 51.152(b)(2) insofar as 310 CMR 8.22 authorizes state and local police, fire department officials, and public health officials to enforce compliance with applicable emergency control action requirements.

For these reasons, EPA proposes that 310 CMR 8.00 satisfies the requirements of CAA § 110(a)(2)(G) and 40 CFR part 51, subpart H. Consequently, we propose to approve 310 CMR 8.00 into the Massachusetts SIP and to convert to full approvals the previous conditional

approvals for the contingency plan requirements of CAA § 110(a)(2)(G) for the 1997 ozone, 2008 ozone, and 2010 SO<sub>2</sub> NAAQS infrastructure SIPs.

### **III. Proposed Action**

EPA is proposing to approve SIP revisions submitted by the Commonwealth of Massachusetts representing a 2011 base year emissions inventory, an emissions statement certification, revisions to 310 CMR 7.12, Source Registration, and 310 CMR 8.00, *The Prevention and/or Abatement of Air Pollution Episode and Air Pollution Incident Emergencies*.

EPA also proposes to convert to full approvals the previous conditional approvals for the contingency plan requirements of CAA § 110(a)(2)(G) for the 1997 ozone, 2008 ozone, and 2010 SO<sub>2</sub> NAAQS infrastructure SIPs. EPA is soliciting public comments on the issues discussed in this document or on other relevant matters. These comments will be considered before taking final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to this proposed rulemaking by following the instructions listed in the **ADDRESSES** section of this **Federal Register**.

### **IV. Incorporation by Reference**

In this rule, the EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference 310 CMR 7.12, Source Registration, discussed in section 2.C. of this preamble, and 310 CMR 8.00, *The Prevention and/or Abatement of Air Pollution Episodes and Air Pollution Incident Emergencies*, discussed in section 2. D. of this preamble.

The EPA has made, and will continue to make, these documents generally available through <https://www.regulations.gov> and at the EPA Region 1 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

## V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- This action is not expected to be an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

#### **List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: November 28, 2018.

Alexandra Dunn,  
Regional Administrator,  
EPA Region 1.

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